



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.          | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|-------------|----------------------|---------------------|------------------|
| 10/824,363               | 04/15/2004  | Chang Nam Kim        | K-0634              | 6306             |
| 34610                    | 7590        | 10/15/2007           | EXAMINER            |                  |
| KED & ASSOCIATES, LLP    |             |                      | GUHARAY, KARABI     |                  |
| P.O. Box 221200          |             |                      | ART UNIT            | PAPER NUMBER     |
| Chantilly, VA 20153-1200 |             |                      | 2879                |                  |
| MAIL DATE                |             | DELIVERY MODE        |                     |                  |
| 10/15/2007               |             | PAPER                |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |                     |
|------------------------------|------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |
|                              | 10/824,363             | KIM, CHANG NAM      |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |
|                              | Karabi Guharay         | 2879                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 08 August 2007.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8 and 10-28 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-8 and 10-28 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 08 August 2007 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1)  Notice of References Cited (PTO-892)

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_

5)  Notice of Informal Patent Application

6)  Other: \_\_\_\_\_

***Response to Arguments***

Amendment, filed on 8/8/07 has been considered and entered.

Corrected Fig 4, filed on 8/8/07 has been approved.

Claims 1-6 and 8 have been amended and new claims 10-28 are added.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-8, 10-28 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant's Admitted prior art (AAPA).

Regarding claims 1 & 14-17, AAPA discloses an organic EL display device (see Fig 1 & Fig 2E) comprising a glass substrate (101), an ITO strip or first electrode layer (102), which is an anode layer; a counter electrode (103), an organic EL layer (104); a cathode strip (105), and a seal cover (109) over the glass substrate (101, see Fig 1) wherein the organic EL layer is formed between ITO strip and the cathode strip or second electrode layer (105), the counter electrode has a plurality of holes (see Fig 2E & 2F), wherein the holes are aligned in the column direction (first direction) and in the row direction (second direction) of the counter electrode, where first direction is substantially perpendicular to the second direction.

Regarding claims 2 & 18, AAPA discloses that the holes in the counter electrode are in the form of polygon (Fig 2E & 2F).

Regarding claim 3, AAPA discloses that the counter electrode (103) is formed of Mo and Cr (Paragraph 12).

Regarding claims 4 & 22, AAPA further discloses an insulating layer 106 between the ITO strip and the cathode strip and a sealant (108) to adhere the seal cover (109) over the glass substrate wherein the insulating layer extends to meet the crossing point of counter electrode and the sealant and to an area of glass substrate so as to be formed on a periphery of the organic layer 104 (see Fig 1).

Regarding claim 5, AAPA discloses that the cathode strip is formed of Mg-Ag alloy and aluminum (Paragraph 14).

Regarding claims 6 & 24-25, AAPA discloses a method of fabricating an organic EL display device (see Fig 2B) comprising forming an ITO strip or first electrode layer(102, 102A) on a glass substrate (101), forming a counter strip (103) on the ITO strip (102A) located in regions other than an emitting region (see Fig 2B) patterning in the counter strip or a second electrode layer to have a plurality of holes (see Fig 2b, 2C, 2D, paragraph 19) having plurality of holes, forming a first insulating layer (106 of Fig 2C) on the glass substrate having ITO strip, forming barrier ribs (107) on the insulating layer (106, see Fig 2D); forming an EL layer (104) and a cathode strip (105, see Fig 2F); and adhering seal cover (109) to the glass substrate (see Fig 2F), wherein the holes are aligned in at least the column direction or first direction and in the row direction or second direction of the counter electrode (Fig 2C & 2D).

Regarding claim 7, AAPA discloses that that the counter strip (103) has a width smaller than that of ITO strip (see paragraph 8).

Regarding claims 8 & 26, AAPA discloses that the plurality of holes includes polygons (see Fig 2B-2D).

Regarding claims 10-11 & 20-21, AAPA, teaches pixel areas formed in the overlapping region of ITO strip (102, 102A of Fig 2F) and the cathode strip (105) and further teaches multiple holes in the counter electrode in each pixel area (Fig 7B, each anode strip 202 corresponds to one pixel and each anode strip 202 having one counter electrode 203 which include multiple holes, at least two holes), since ITO strips and the counter electrodes are formed both in column and row directions (see Fig 2F) multiple holes are aligned in the column and row directions.

Regarding claims 12-13 & 27-28, AAPA, teaches pixel areas formed in the overlapping region of ITO strip (102, 102A of Fig 2F) and the cathode strip (105) and further teaches multiple holes in the counter electrode in each pixel area (Fig 7B, each anode strip 202 corresponds to one pixel and each anode strip 202 having one counter electrode 203 which include multiple holes, at least two holes), since ITO strips and the counter electrodes are formed both in column and row directions (see Fig 2F) multiple holes are aligned in the column and row directions.

Regarding claim 19, AAPA discloses that that the counter strip (103) has a width smaller than that of ITO strip (see paragraph 8).

Regarding claim 23, AAPA discloses that the holes have same shape (Fig 2B-2F).

#### ***Response to Arguments***

Applicant's arguments filed 8/8/07 have been fully considered but they are not persuasive. Applicant in the Remark discloses that Fig 7B which is considered as prior

art, teaches plurality of holes which is aligned in at least one of a column direction or row direction (see Remarks, page 10, paragraph 4). So AAPA does teach plurality of holes per pixel as shown in Fig 7B.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karabi Guharay whose telephone number is 571-272-2452. The examiner can normally be reached on Monday-Friday 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*KGuharay*  
Karabi Guharay  
Primary Examiner  
Art Unit 2879

10/5/07